

APPENDIX G:
ALTERNATIVES CONSIDERED BUT DISMISSED BY MATL

<p style="text-align: center;">APPENDIX G-1</p> <p style="text-align: center;">SUMMARY OF MATL'S DISMISSED ALTERNATIVES AND ALIGNMENT SEGMENTS</p>		
Name of Alternatives or Segment	Location	Reasons for Not Carrying Forward
Old Primary - Segment (1)	Original Primary Alignment from Canadian Border to Cut Bank	This alignment was dropped because of its close proximity to two residences, many diagonal farmland crossings, and proximity to wells. This alignment was also dropped because of changes to the preferred Canadian border crossing, and because of limited right-of-way space due to a prairie pothole along Santa Rita Road.
Old Primary - Segment (2)	A subsequent segment revision of the Primary alignment with its border crossing farther west, connecting back to A1 approximately 8 miles to the south.	This segment was further modified (to what is shown as A3 on the map) and ultimately dropped. This change was based on a final revision to the preferred Canadian border crossing location to what is now shown on the proposed route. A2 was also dropped due to diagonal crossings of farmland/cropland and proximity to wells.
Old Primary - Segment (3)	A subsequent Primary Route segment revision altering A2, moving the Canadian border crossing slightly farther west. A3 connects back to A2 approximately 4 miles to the south of the Canadian border.	This segment of the Old Primary Route was further modified to what is now the proposed route as part of initial engineering/surveying in Spring '06 because it crossed wetland areas. This effort allowed for re-routing that better avoided wetlands and prairie potholes.
Old Primary - Segment (4)	Original Primary Route Segment - Camp Nine Road south to old Marias River Crossing	This segment was dropped because it did not make use of the available public lands near the Marias River crossing as is required under MFSA. Routing was modified to that of the proposed route to take advantage of these public lands (BLM).
Old Primary - Segment (5)	Original Primary Route Segment from south of the Marias River Crossing to Bullhead Road	This segment was dropped because it did not utilize available nearby rangeland and had a greater impact on croplands in this location. The proposed route better utilizes rangeland and has less impact on croplands.
Old Primary - Segment (6)	Original Primary Route Segment from Bullhead Creek to Burlington Northern Railroad	This segment was dropped due to many diagonal crossings of farmland/cropland. Routing was modified to that of the proposed route to minimize these impacts to agricultural lands and utilize available rangeland to a much greater extent.
Old Primary - Segment (7)	A subsequent Primary Route Segment 3-4 miles southwest of Conrad near Pondera Coulee.	This segment alternative was dropped due to the proximity of an occupied residence. This segment came within .2 miles to the east of a residence.
Old Primary - Segment (8)	Original Primary Route Segment 2-3 miles southwest of Conrad near Pondera Coulee.	This segment alternative was also dropped due to the proximity of an occupied residence. This segment came within .4 miles of a residence to the west.
Old Primary - Segment (9)	Original Primary Route Segment from two miles north of Brady to approximately three miles north of the Teton River	This segment was dropped to that of the proposed route in this location primarily to avoid impacts to six residences, and to lessen impacts to cropland. In particular this segment came within 0.5 mile of four residences north of Brady as well as within .5 mile of a school.

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Old Primary - Segment (9-south)	Original Primary Route Segment around the Teton River Crossing	This segment was dropped because it did not take advantage of nearby public lands (DNRC lands to the west) for the Teton River Crossing and because of probable cultural resources (tipi ring sites) on the northern bluffs of the Teton River in this specific location. The Teton River crossing was moved to the west in order to make use of available public lands and avoid potential cultural impacts, as well as to avoid mature riparian cottonwood forest.
Old Primary - Segment (10)	A subsequent Primary Route Segment that heads west from a point along the Current Primary Route south of Dutton, and continues 4-5 miles to the east where it connects with the Old Primary Route and continues two miles south.	This segment was dropped due to environmental and engineering constraints (slope stability issues) in constructing the line across Timber Coulee in this locale. In addition, this segment alternative did not resolve the goal of minimizing diagonal crossings of farmland to the extent of the current proposed route.
Old Primary - Segment (11)	Another subsequent Primary Route Segment starting several miles south of A10, that heads west ~7 miles to where it connects with the Old Primary Route	This segment was dropped because it crosses close to an existing range/farm near its eastern terminus. In addition, this segment alternative did not resolve the goal of minimizing diagonal crossings of farmland to the extent of the Current Primary Route.
Old Primary - Segment (12)	Original Alternative that followed east of the Great Falls Shooting Sports Complex	This segment conflicts with plans for expansion of the shooting sports complex, including plans for new and expanded buildings. Given this conflict, this segment was dropped in favor of the proposed route which is located west of the complex.
Old Alternative B Segment (1)	Original Alternative B from Canadian Border to where it connects with the Old Primary Route	Original Alternative B was modified and moved to the east to what is labeled as B2 to further avoid impacts to wetlands. In addition the original Alternative B also crossed within .25 mile of an occupied residence.
Old Alternative B Segment (2)	A subsequent Alternative B segment from Canadian Border to (new) Primary Route	This segment was dropped to avoid impacts to nearby residences and because there is no longer a Canadian Alternative or border crossing in this specific location. Alternative B now starts near Cut Bank and continues south to the Great Falls terminus.
Old Alternative B Segment (3)	Original Alternative B near Bullhead Creek	Various small sections of this segment were modified to what is now the proposed alignment to better avoid residences and irrigated croplands, avoid wetlands, as well as to improve the alignment of the route with property boundaries.
Old Alternative B Segment (4)	Original Alternative B from Dry Fork of the Marias south to South Pondera Coulee	Various small sections of this segment were modified to what is now the proposed alignment to better avoid residences and irrigated croplands, as well as to improve the alignment of the route with property boundaries.
Original Route C	From Canadian Border to Great Falls	Original Route which was modified to what is labeled as "Modified Route C" (C2) below to better avoid residences and passage across irrigated croplands, as well as to improve the alignment of the route with property boundaries.

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Modified Route C	From Canadian Border to Great Falls	The entire C2 routing was dismissed because it was the longest of the considered routes and would be the most costly to design/construct. More estimated acreage would be required (access roads, staging areas, etc.) than the Primary Route (43 acres versus 37 acres). Alternative C also had relatively higher potential impacts to visual resources (comes within 1 mile of 160 developed residences as compared to 146 for the Preferred Route). C2 also had a larger impact to prime farmland (44 miles versus 33 miles) and farmland of statewide importance (47 miles versus 43 miles) as compared to the Primary Route. In addition, this route did not match up with the finalized secondary Canadian border crossing alternative (moved to the east).
August Version Route C	From Canadian Border to Great Falls	This route was prepared for the MFSA application. This route was dismissed because it is the longest alternative, would require more disturbance, and very close to or crosses four houses.
Old Western Great Falls Alternative	Original agency alternative that connects with Great Falls to the south and west of the Primary Alternative	This alternative was originally identified in order to provide another alternative in the in the southern quarter of the project area that made wide use of rangeland instead of cropped land. However, this alternative was dropped/modified to what is labeled as W2 in order to avoid crossing the existing WAPA line and improve its alignment with property and section line boundaries.
Modified Western Great Falls Alternative	Modified agency alternative that connects with Great Falls to the south and west of the Primary Alternative	After flyover verification, this revised W2 alternative was developed to minimize deflections and parallel the WAPA line more closely. This alternative has been retained because of its use of range land and pasture as well as its more extensive use of section and property boundaries.
Cut Bank to Shelby Alternative	Alternative that follows from Cut Bank to Shelby	This alternative was dismissed in the original application due to the need for extended diagonal traversing of agricultural lands. This alternative also had more engineering requirements and land requirements, and would have resulted in higher project costs.
Shelby South Alternative	Alternative that follows from Shelby south to Great Falls	This alternative was dismissed in the original application due to engineering constraints and the potential for disturbing many more cultural and archaeological sites near the Maris River breaks area south of Shelby.
Eastern Alternative	Alternative that follows Interstate 15 from Border to Shelby	This alternative was dismissed in the original application due to difficulties with the connection required via the Shelby South alternative described above.
NWE Alternative	Rebuilds the existing NWE 115-kV line.	This alternative was dismissed in the original application. This route was considered infeasible for economic reasons, and there would also have been a logistical difficulty in maintaining service while upgrading the existing line.